

THE
MEDICAL AND SURGICAL REPORTER.

No. 1183.]

PHILADELPHIA, NOVEMBER 1, 1879.

[Vol. XLI.—No. 18.]

ORIGINAL DEPARTMENT.

LECTURE.

RELAPSE IN TYPHOID FEVER.

Delivered at the Philadelphia Hospital, Sept. 4th, 1879,

BY WILLIAM PEPPER, M.D.,
Of Philadelphia.

REPORTED FOR THE MED. AND SURG. REPORTER.

GENTLEMEN:—The man before you to-day presents rather an interesting phase of typhoid fever. He is a colored man, twenty-four years old. Four weeks ago he was attacked with the ordinary prodromus of a continued fever—lassitude, aching in the bones, weakness and fever, associated with the peculiar symptoms of typhoid fever, looseness of the bowels, loss of appetite and bleeding at the nose. He was seen by a physician in the city, and his disease pronounced typhoid fever. He was sent here after the disease had lasted about twenty-five days, and was then probably near the close of the attack. When first seen after his admission he had a temperature of 105° , which was probably due in large part to improper exposure and effort, and which, within thirty-six hours, ran down to 100° . We, of course, cannot determine the presence or absence of rose-colored spots, on account of the color of the skin; but whenever we find a patient with considerable continued fever and looseness of the bowels, it should always awaken a strong suspicion of typhoid fever. We have hardly any other continued fever of marked severity, and with marked prostration, in which looseness of the bowels is present. In simple continued fever we usually have constipation, and in all other continued fevers constipation is the rule. We look, in typhoid fever, for a

certain course in the range of temperature, but in this case we cannot get at this. We then look for special symptoms occurring in typhoid fever—bronchial irritation and bleeding from the nose. This man has no bronchial symptoms, but he has had epistaxis. This man has had, then, without doubt, typhoid fever. A classical case of typhoid fever lasts about twenty-eight days, but many cases terminate in twenty-one days, with rapid cleaning of the tongue, reduction of pulse rate and temperature, and return of appetite. In a few cases typhoid fever terminates earlier than three weeks. You will meet with cases in which all the phenomena of typhoid fever have been well marked, that terminate as early as the seventeenth or eighteenth day.

When our patient was admitted, he was, by a mistake in the admission card, sent to the out ward instead of the hospital, and allowed to walk about for one day. He was found by the resident physician with a high temperature and looseness of bowels, and was immediately sent to the hospital. Since then his temperature, which for several days was moderately low, has rapidly increased, and last night it reached 104° . This patient has a relapse of his fever. Relapses in typhoid fever are so common that it behooves us to study them carefully. A patient may have been doing well; may have advanced several days, or even a week or two, in convalescence; then he becomes less well and a relapse sets in. You are, in these cases, to carefully study the case, in order to determine whether the patient is suffering from a relapse of his fever or from one of the sequelæ of typhoid fever. There is no disease in which there are more sequelæ than in typhoid fever.

Thus you have marked irritation of the nervous system, irritation of the bronchial and gastro-intestinal mucous membranes. I have seen ulcers on the tongue, mouth and fauces, in this disease, but they usually affect the lower part of the ileum. We have the mesenteric glands enlarged and inflamed. We find that, owing to the continued high temperature, the muscles undergo degeneration, particularly the muscles of the abdomen and of the heart. We may have, in consequence of one of these tissues becoming more irritated than usual, a complication or a sequel developed in the course of the attack. You should be constantly on the lookout for the development of these complications.

Insanity and dementia are not very rare sequelæ, resulting from the prolonged irritation and malnutrition of the nervous system. We have various forms of paralysis, from trouble in the spinal cord. Inflammation of the bronchial mucous membrane and parenchyma of the lung, ulceration of the small and large intestine, inflammation of the veins, phlegmasia alba dolens, obstruction of the femoral vein, inflammation of the periosteum, and necrosis of the bones. All these are among the sequelæ of typhoid fever.

When a patient has been doing well and the temperature going down, and we notice that the man is getting a little dull, the tongue coating and the temperature mounting up again, we may be sure that some mischief is going on. The man is about to have a return of his fever or develop one of the sequelæ. We have to decide this point in connection with our patient. This man has an accelerated pulse, a tongue foul and coated, and a return of hebetude. He may have any of the sequelæ we have mentioned. His pulse is 96 per minute; not immoderately fast. He has no cardiac murmur. He has no cough. There is perfect resonance over the whole lung, back and front. There is no pain on deep inspiration. There are no râles. We can therefore exclude pleurisy and pneumonia. There is no disease of the heart or lungs. There is no trouble with this man's bowels; they are, as yet, quiet. There is no marked degree of tympanites; the bowel is a little distended and is resonant throughout. Let me, in passing, urge you, if you are disposed to try to develop gurgling in the iliac fossa, that you will not push your finger through the ulcers in the intestine. Even if you do develop gurgling, it is worth nothing, for it is present in other diseases and also in health. The injury that may be inflicted upon the bowel by the examination is incalculable. If you do search for gurgling, do it by uniform pressure,

and not by thrusting the finger into the iliac fossa.

I press upon the calf of this man's leg, but it causes no pain. In phlegmasia, one of the earliest symptoms is extreme tenderness of the calf of the leg upon pressure. This pain is due to the compression of the inflamed popliteal vein against the bone. This symptom will appear before you can detect any hardness of the vein or any swelling of the leg. There is no trace of phlegmasia here. There is no evidence of any local lesion in this case.

Typhoid fever does truly relapse. After a patient has gone through the whole course of an attack of typhoid fever, the disease may begin again and the patient have a second attack. I have seen two, and even three, relapses, in which the characteristic symptoms reappeared and ran through their entire course—the eruption, delirium, fever and purging, all appearing. These relapses do not last as long as the primary attack. They usually run their course in two or three weeks. You will find that the temperature rises more rapidly and does not present the ordinary changes met with in the primary attack. You are apt to find, in these relapses, one set of symptoms more prominent than the rest; according to my experience it is the abdominal symptoms that are usually most prominent. I explain this upon the fact that the typhoid poison causes inflammation and ulceration of Peyer's glands and of the mesenteric glands, and upon this local disease depends many of the symptoms of typhoid fever.

I believe that the eruption is owing to the ulcers in the intestine; that upon irritation of the vaso-motor nerve connected with the inflamed coat of the intestine, a reflex action is sent through the vaso-motor nerve connected with a small area of the skin, causing the congestion which we call rose-colored spots. It has been noticed that as typhoid fever passes through its course there will be repeated crops of these eruptions, and I think it is probable that these eruptions correspond to ulceration in different groups of glands. All the glands do not ulcerate at the same time, but they break into ulceration in successive crops. As each crop of ulcers form we have an exacerbation of the symptoms. Take, for instance, a patient at the close of three weeks in typhoid fever; we will find some glands ulcerated, and some only inflamed, and which may not pass on to ulceration, under proper care; but let the patient be exposed to cold, to some indiscretion in eating; the glands which are inflamed, weak, and disposed to break down, hurry

forward to ulceration, and all the symptoms of the previous attack reappear. These relapses, then, are, in my opinion, very often connected with renewed ulceration. I have seen perforation and death occur in a third relapse of typhoid fever, and the ulcers found high in the ileum, while those near the valve were almost healed.

After having excluded all local disease, we arrive at the diagnosis of a relapse, and we place the patient upon the treatment suitable for typhoid fever. We place the patient at absolute rest, and reduce his temperature as much as possible, by sponging him with cool water every three or four hours, according to the violence of the fever. We will keep him in a cool part of the ward, with plenty of ventilation. He will have an absolutely liquid diet. Considering that he is now in the beginning of the fifth week of his sickness, we will allow him more stimulants than we otherwise would—from four to six ounces of sherry; or if his strength begins to fail we will substitute brandy. He is also taking a moderate amount of oil of turpentine, five drops every three hours. This, with twelve grains of quinia during twenty-four hours, will constitute the treatment. We shall watch the progress of this case with interest.

COMMUNICATIONS.

YERBA SANTA—OBSERVATIONS ON ITS THERAPEUTIC VALUE IN THE TREATMENT OF CATARRHAL AFFECTIONS OF THE UPPER AIR PASSAGES.

BY DR. J. C. WILSON,

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The daily increasing number of new remedies, the persistency with which they are forced upon the attention of the profession, the value of some of them, as established by the concurrent testimony of numerous observers, and the absolute worthlessness of others, either in the diseases for the cure of which they are vaunted, or for any other purpose, warrant the publication, indeed, demand the publication, of the results of systematic studies of their properties, whether conducted at the bedside or in the laboratory.

During the winter of 1878-9 I prescribed Yerba Santa very frequently in catarrhal affections of the air passages, both in hospital and in private practice. The somewhat preposterous claims made for it by some who have made it the subject of communications to the journals were not realized, but its use was attended with such satisfactory results in a large number of instances,

that I have come to look upon it as a remedy of great value.

Yerba Santa, *ertodyction glutinosum*, is described as a freely branching evergreen shrub, from three to six feet in height, inhabiting the mountainous districts of the Pacific slope. The leaves are petiolate, finely serrated and oblong; their upper surface is smooth and glistening, and of a rich, deep green color. It is thickly varnished with a resinous principle. The under surface is of a silvery gray. The leaves alone are used in the preparation as a medicine. This plant is said to be held in high favor as a domestic remedy among the country people of California, both Spanish and English-speaking. The former know it by the name which heads this paper; the latter call it "gum-weed" and "mountain balsam."

The remedial virtues of the plant are contained in the gum-resin which is abundantly yielded by the leaves.

It is sold in the shops in the form of a fluid extract, the taste of which is aromatic, sweetish, intense, and somewhat acid. The acidity makes it disagreeable to take, and is not wholly done away with by combination with mucilage, syrups or glycerine. The dose of the fluid extract is from ℥xv to f. 3j.

To obviate the difficulty of administration it occurred to me that it might be well given in the form of a pill. Accordingly, in November, 1878, suggested to Messrs. Blair the plan of evaporating the fluid extract to a consistency suitable for this purpose. This was found to be quite practicable, and I have since that date habitually prescribed the drug in pill form whenever possible. For those patients who are unable to swallow pills I have ordered a palatable but less efficient elixir, prepared by Metcalf & Co., of Boston. The inspissated extract has been found in all respects equal to the fluid extract, from which it is prepared.

Careful evaporation of the fluid extracts supplied by a number of manufacturers yielded an amount of solid residuum varying from 92 to 210 grains to the fluid ounce. The dose of the solid extract has usually been from three to nine grains, three or four times a day. Owing to the large proportion of gum it contains Yerba Santa is highly demulcent. It is at the same time slightly astringent; while it exerts a special action upon the mucous membranes of the upper air passages, which may be described, for want of better terms, as tonic and sedative, I have found it most useful in subacute inflammatory conditions of this tract.

In subacute laryngitis the action of this remedy has in a number of instances been extremely prompt. Patients who had suffered from previous attacks have testified enthusiastically to its efficiency. The relief of the sense of dryness in the throat, the tickling, the irritative cough, has been speedy, and the further use of the drug has speedily brought about the full restoration of the voice.

In subacute bronchitis its use is no less satisfactory. No remedy or course of treatment has seemed so useful to me in our common "winter colds," in persons otherwise healthy. That it is an expectorant, in the sense of increasing the bronchial secretion, my experience does not enable me to affirm, but of its power to favorably modify that secretion with great promptness, in the class of cases under consideration, I have had abundant clinical evidence; and it is through the change in the secretion, in part, and in part, perhaps, by reason of some sedative property of the drug, that the cough quickly yields under its influence.

There is another form of bronchitis, a form difficult to treat satisfactorily, and common in this climate, in which Yerba Santa is of great use. I mean the winter rheum of old people. It occurs in elderly persons of feeble constitution, and is quite different from the bronchial catarrh of the gouty. In this last, as well as in cases of asthma associated with chronic bronchitis and pulmonary emphysema, I have found it useless, alike in the attacks and in the intervals between them. In combination with opium and belladonna, its use has seemed advantageous in the cough of advanced phthisis. I have not used it in the earlier stages of that malady.

Its action upon the laryngeal and bronchial mucous membrane suggests its employment in some of the forms of nasal catarrh. I have not had the opportunity to verify the claims set forth for it in the treatment of these affections.

It was administered to a number of individuals affected with influenza, during the mild epidemic which prevailed during the early months of last winter. General treatment was also employed. It appeared to me that Yerba Santa had in these cases very little influence either upon the course of the disease or upon the intensity of the symptoms.

In acute inflammations of the air passages, such as are attended by pyrexia and by a good deal of constitutional disturbance, Yerba Santa is not indicated.

It has an undoubted diuretic effect. Patients

in all cases report that the flow of urine has increased while they took this medicine. I have made no observations upon the influence of Yerba Santa upon other mucous membranes. It is said to be of service in the treatment of hemorrhoids, both locally applied and internally administered.

Yerba Santa given in the form of pills does not interfere with the appetite or digestion, possessing in this respect a decided advantage over most of the drugs that are in common use in the treatment of the affections in which it is indicated.

I have preferred to submit to the reader the above summary of my observations, rather than to attempt to reproduce the cases—not in themselves otherwise of especial interest—from which the conclusions have been derived; or to illustrate the value of the remedy in tables of figures and percentages, which could not fail to convey fallacious conclusions, because of the dissimilarity of cases of those lighter maladies, and our inability to represent numerically important factors in the problem which each patient presents. My object in preparing this brief paper will have been gained if a remedy of no mean value is thus brought to the notice of some who, among the multitude of new drugs, have overlooked it.

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CHOLERA INFANTUM.

BY HORATIO R. BIGELOW, M.D.,

Of Washington, D. C.

From the monthly exhibit of "births, marriages and deaths," issued by the Health Officer and Registrar of the District of Columbia, we extract the following: In June the reported deaths from *cholera infantum* were 74; of these 23 were white males, and 23 white females; 12 were colored males, and 16 colored females. Sixty-four were under 1 year in age; ten were from 1 to 5. During the same month the deaths from diarrhoeal diseases were 55; of this number 18 were white males, and 14 white females; 12 were colored males, and 11 colored females. Thirty-seven were under 1 year in age; five from 1 year to 5 years; one from 5 to 10 years; one from 10 to 20 years; four from 20 to 40 years; six from 60 to 80 years; and one was over 80 years. The highest temperature attained during the month was 95°, the lowest was 51°, range 44°. The greatest daily range of temperature was 28°, on the 9th and 14th insts. The least daily range was 6°, on the 3d inst. The mean of maximum temperatures was 83.3°, and the mean of minimum temperatures 63°. The

mean daily range of temperature was 20.3. The monthly range of the barometer was 0.778. In July there were reported 74 deaths from cholera infantum, 21 being white males, and 16 white females; 23 colored males, and 14 colored females. Of the whole number, fifty-seven were under 1 year of age, and seventeen were from 1 to 5 years. During this month there were 71 deaths from diarrhoeal diseases; 14 being white males, and 21 white females; 23 colored males, and 13 colored females. Forty-four were under 1 year; nine from 1 to 5 years; one from 5 to 10 years; three from 20 to 40 years; four from 40 to 60 years; and ten from 60 to 80 years. The highest temperature was 102°, the lowest was 59°, range 43°. The greatest daily range of temperature was 28°, on the 14th and 15th insts. The least daily range of temperature was 6°, on the 30th inst. The mean of maximum temperatures was 88°, the mean of minimum temperatures was 68.5°, the mean daily range being 19.5. The monthly range of the barometer was 0.710. In August there were 29 deaths from cholera infantum, 8 of which were white males, and 11 white females; 6 were colored males, and 4 colored females. Twenty-one were under 1 year of age, and eight were from 1 to 5 years. From diarrhoeal diseases there were 37 deaths, 6 being white males, and 6 white females; 18 were colored males, and 12 were colored females. Fourteen were under 1 year of age; twelve were from 1 to 5 years; one was from 20 to 40 years; six were from 40 to 60 years; three were from 60 to 80 years; and one was over 80 years. The highest temperature was 94°, on the 2d and 3d insts. The lowest temperature was 55°, on the 10th inst. Range 39°. The greatest daily range of temperature was 26°, on the 11th inst. The least daily range was 8°, on the 17th and 26th insts. The mean of maximum temperatures was 83.9°. The mean of minimum temperatures was 66.0°. The mean daily range of temperature was 17.9°. The monthly range of the barometer was 0.589. During the three months, June, July and August, the total number of deaths from cholera infantum was 177; and from diarrhoeal diseases 163; 142 of those who died from cholera infantum were under 1 year of age. 95 of the deaths from diarrhoeal diseases were of the same age, 1 year or under. Of deaths from cholera infantum, 52 were white males, and 50 were white females; 41 were colored males, and 34 were colored females. Of deaths from diarrhoeal diseases, 38 were white males, and 41 were white females; 48 were colored males, and 36 were colored females.

From these statistics, and others of similar nature, it is manifest that the custom of the country is to class in the mortality returns, under the common head of Cholera Infantum, all the deaths from simple and inflammatory diarrhoea and entero-colitis; whereas the fact is, that Cholera Infantum is an exceedingly rare as well as fatal disease, occurring as an epidemic and rarely sporadically. Indeed, so rare is it, that I very much doubt if there were three cases of *genuine* cholera among the infants of Washington during the three summer months. This disease, which is identical with the follicular enteritis of Billard, with the apyretic and febrile follicular diacrisis of Barrier, and with the choleric form gastro-intestinal catarrh of Rilliez and Barthez, is exceedingly rare in Europe, and for no assignable cause, except that a sharper distinction between it and inflammatory diarrhoea is made by practitioners on the Continent and in England. The mortality just cited is beyond precedent, following no known law, depending upon no known meteorological changes.

It cannot for a moment be supposed that the deaths from Cholera Infantum, where no epidemic of cholera existed, exceeded all other deaths from diarrhoeal diseases, or that the proportion in 1000 of population, for the month of July, should be 5.224. Evidently the true nature of the pathogeny of Cholera Infantum is not understood, or if it be, physicians are careless in the use of terms.

The anatomical lesions of entero-colitis, inflammatory diarrhoea and cholera infantum, are as different as are the symptoms and treatment. The consensus of medical opinion is tending to class Cholera Infantum as a disease of the great sympathetic and not primarily as a diarrhoea. The vaso-motor nerves being paralyzed, the mouths of the blood vessels nourishing the intestinal walls are open, and from them serum is constantly exuded. This exudation acting as a foreign body originates an intestinal catarrh, and it is this diseased condition which acts by contiguity of structure, and sometimes by actual contact, upon the sympathetic, producing collapse. Moreau's Experiments (*Comp. Rend. de l'Acad. des Sciences*, t. lxxj. p. 554, 1868) confirm this view.

There is an inherent predisposition to the disease among some children, and the more especially among negroes. This condition is intensified by the extraneous conditions of bad air, dentition, heat, insufficient nourishment and improper clothing. Undigested food, of itself alone, is incapable of originating the disease,

though this is a fruitful source of summer diarrhœas. It is more apt to manifest itself among the poor and ill fed, who dwell in crowded places, abounding in pestilential smells, where sewer gas penetrates into every chamber, and where rotting garbage is allowed to remain for days at a time at street corners and in alley ways. It always occurs between the ages of one and five years, because it is often coincident with dentition, this latter being a condition of nervous irritability.

The anatomical lesions of cholera infantum are peculiar. There is always proliferation and exfoliation of the cells of the mucous membrane; the muscular layer of the intestine loses its essential characteristics; Auerbach's plexus undergoes a kind of fatty degeneration; the chalice cells present large, gaping mouths; the blood vessels of the villi are increased in calibre; the mucous follicles and glands of Peyer are enlarged. In diarrhœas generally we find this enlargement of the mucous follicles and of Peyer's patches, together with an inflammation of the mucous membrane; but nothing more, the centres controlling the vaso-motor system being situate in the cerebro-spinal axis, and not in the sympathetic ganglia.

If the foregoing theory of the pathology of cholera infantum be true, our remedies should be cerebro-spinals; chalk mixture, rhubarb, and their congeners, are equally useless; and upon no possible ground can their use be defended. Carbolic acid may be given, to correct the nature of the evacuations, though it does not act as an astringent. Ergot, in combination with some one of its synergists is often very valuable. At first it may increase the amount and frequency of the discharges, and may occasion pain, but very soon its action in contracting the arterioles is manifested. It slows the heart's action, increases the blood pressure, and incites to action the muscular coat of the intestine. Strychnia may very properly be regarded as a synergist to ergot. It unquestionably exerts a great influence on the sympathetic, as it does also in lessening the calibre of the arterioles. Quinine, either alone, in full doses, or in combination with iron and strychnia, is a most valuable remedy. Blisters to the head and ice to the spine, together with the free use of a solution containing oil of anise, oil of cajuputi, and oil of juniper, equal parts, added to ether, sulphuric acid and tincture of cinnamon, are all applicable to promote reaction. Quinine in full doses, combined with ergot, should be given from the commencement of the disease. A spiced brandy poultice applied over the abdomen often

affords relief. Digitalis is sometimes indicated, to promote the flow of urine. Hot brandy punches may be given from time to time. The best results may be obtained by careful attention to hygienic regulations. The diet should be non-farinaceous, and I have found that barley-water, or Horlich's food for infants, best answered this purpose. Good ventilation is an essential, and absolute rest in bed should be enjoined.

HOSPITAL REPORTS.

GOOD SAMARITAN HOSPITAL, CINCINNATI, OHIO.

CLINIC OF JAMES T. WHITTAKER, M.D.,
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REPORTED BY A. H. KELCH, M.D.

Hemiplegia, from Cerebral Hemorrhage.

GENTLEMEN:—I present to you to-day a case without a history. You will observe, from the condition of the patient, that we can get no response from her at all. But you may make a diagnosis from inspection alone. This woman was brought into the house about four days ago. Her condition at that time was more grave than now. As it is, the patient experiences no pain at all, although she suffers extreme distress. But the distress is altogether mental, and arises from emotional anxiety. You may, those of you who are at all familiar with the phenomena of disease, be able to make a diagnosis in this case, from inspection alone.

You will notice the difference in the two sides of the face, more particularly about the angles of the mouth and eyes, where the expression in general is most developed. The difference in the expression will depend somewhat, of course, upon the amount of expression with which the individual is naturally endowed. In some individuals there is naturally none, and there is every grade, up to great intelligence. You can mark some difference in the expression of the two sides in this case; not much about the forehead nor the eyes; more about the parts of the face moved by the buccinator muscle; more still in the lines of expression about the angle of the mouth. Here it is, indeed, that you notice the change much, more distinctly, as a rule, than elsewhere, because, as you are aware, it is the feature of the most expression, naturally. It is upon the lines of expression about the angles of the mouth and the eyes that the artist expends the most of his time. If we can bring out some emotional disturbance in this case we shall see, as you now observe, the disparity much more pronounced. We do not notice in the neck any difference in the two sides, except that the head inclines toward the left side. If I now turn the head over to the right, as you see, it drifts back again to the left. When we come to look further along the body, we find differences in the hands. The hand on the left side is cramped. The skin looks as if it were lifted

somewhat from the subjacent tissue; moreover, it is more hyperæmic, and you notice upon it some marks. When I lift the right hand I experience a feeling of resistance and rigidity. You would naturally expect that when I lift it it would fall back, but it is comparatively rigid. You observe I can hardly straighten out the forearm. On the opposite side everything is entirely different; the muscles are perfectly resolved and flaccid.

If we continue our examinations to the lower extremities, we find about the same changes observed in the hands. The right foot is larger than the left. There is marked disparity between the size of the feet, because the left is œdematous, and anybody that will put his hands on the two feet will recognize the difference in temperature; one is hot, the other is cold. I get the same sense of rigidity in the right foot that that we had in the hand, though the opposition is not so marked. The disturbance of the sensation is everywhere profound. You see that flies crawl over the surface of the right side of the face without notice on the part of the patient. Here, too, is an eruption on the right side of the face, a copious, papular eruption. What is that? The simplest solution is the easiest. The papules are relics of unnoticed mosquito bites.

Now, what is the occasion of this paralysis? All that we know of the patient is, that she was a strong, hearty woman; she went to bed well, and woke up, if I may so speak, in this condition, a few mornings since. One who never studied medicine would know that this loss of sense and sensation and motion indicates disease of the brain, a disease whose effects extend *a capite ad calcem*, from the head to the feet. We have here a case of paralysis of the whole right side, a hemiplegia, which, of course, means that the lesion is situated in the left side of the brain. But it does not indicate what kind of a lesion. We desire to know what kind of a lesion exists and what we can say of its future, even if we can do nothing for its relief. The simplest is the easiest solution. You would say this patient has had a hemorrhage into the left side of the brain, and is paralyzed as a result of the pressure of blood. But it would not be safe to jump at such a conclusion, for exactly such conditions may be produced by any cause that would interrupt the circulation of the blood through a great vessel in the brain. One of the large vessels sometimes becomes occluded by an embolus or a thrombus. The question is, have we to deal here with an embolus, a thrombus, or with a hemorrhage?

The patient knows nothing as yet; she woke up with an abolition of consciousness, if we can say such a thing, and more like a hemorrhage is this suddenness of attack. But suddenness does not necessarily mean hemorrhage, because a clot detached from the valves of the heart may almost immediately plug up one of these large vessels and produce the same results. But this patient shows no heart lesion that we can detect, nor any other source for an embolus. This patient, you will observe, is past the middle period of life. Here are evidences of age, in the gray color of her hair and in the folds of the skin, and in the majority of cases where hemorrhage takes place it is in people advanced in life. The

degenerative changes that occur in the various tissues of the body as old age begins to creep upon the individual affect the blood vessels of the brain likewise, so that they become brittle and fragile. They break, and blood then pours out into the brain and rips up and mutilates its substance. Such accidents are not confined to the brain alone. The same thing sometimes occurs in the lungs, and especially in the spleen, and the term apoplexy has been improperly applied to these extravasations of blood. The term apoplexy simply means struck down. The brain is much more frequently affected by extravasations of blood than any other tissues, and we see how easily this may be explained by the condition of the brain substance. You know, if you hold a brain in your hand it flattens out; it has not so firm a consistence to support its vessels as even the spinal marrow, and in this fact we discover a reason why hemorrhage happens so much less frequently in the spinal cord. Then the canals in which the cerebral vessels run are very wide and loose. This stroke may be caused by anything that blocks up the blood in the brain or obstructs the circulation there. When a rupture does occur in a vessel, there may escape only blood sufficient to fill a space the size of a pin's head, and again there is sometimes a whole lake of it, tearing up the brain substance and filling up the ventricles. How shall we discover the cause for this hemorrhage? We look first for that disposition to hemorrhage that may be transmitted by heredity. This disposition may affect the patient on the part of the blood vessels or the nerves. We look for an inherent instability of nerve force, a condition strictly inherited and favoring spasmodic contractions and congestion. Much more frequently we see the vascular tone impaired by disease of an important organ, especially by the kidneys. Bright's disease is, sooner or later, always attended by changes in the blood vessels. In Bright's disease hypertrophy of the heart must supervene to force the blood current through the capillaries, deprived, by a blood poison or by nutritive change, of their natural tone. The urine in this case does not reveal the existence of Bright's disease.

We cannot tell anything about the gravity of the case from the amount of the hemorrhage. The prognosis is rather determined by the seat than the extent of the effusion. But no patient ever dies suddenly from brain disease. The sudden deaths of which we read are caused by heart disease, by sudden arrest of the pulsations. An individual must live some time, varying from half an hour to several days, in even the worst hemorrhage into the brain. A person may succumb to a hemorrhage when the quantity of blood thrown out occupies only a space the size of a pin's head, and another may recover from an effusion like a lake. The position of the hemorrhage is the point, not the amount. In early life the hemorrhage is generally meningeal; in later life it is cerebral. With every decade of life the danger of hemorrhage increases. But it would appear, from statistics, that after sixty years of age the tendency to apoplexy decreases; this decrease is only apparent, however, because few indeed survive that time to

be affected by apoplexy. Cerebral hemorrhage occurs in gradually increasing proportion up to sixty years of age.

Whenever an individual is stricken down with apoplexy, from whatever cause, there is sometimes some warning of the approaching calamity. Such premonitions did not occur in this case. There was no vomiting; no headache; no twitching of the face; no prodromata, that we know of, of any kind.

When cerebral hemorrhage occurs, the attack announces itself in one of two ways: In the one case the individual falls, like a statue falls; then there is a total abolition of sensation and consciousness; the patient lies in a state of profound stupor; the face is flushed; the heart throbs; the pulse bounds; respiration is stertorous; the conjunctiva is injected; the pupils, contracted or dilated, are insensible to light; this is the characteristic picture of an individual plunged into apoplexy. There is another picture, where the patient falls and becomes blanched; there is extreme pallor of the surface and profound collapse. Such patients sometimes speak, after recovery, of having been struck on the head from behind. The amount of blood poured out into the brain could not, by any means, by its loss to the general circulation, produce this extreme pallor. The pallor and collapse result from the shock to the nervous system.

What we want to know now is the future of this and like cases. Not every case is so grave as this. Upon what factors can we rest our prognosis? The first and most important factor is the duration of the coma. You are always anxiously inquired of, in these cases, as to when the patient will recover consciousness. The longer the patient lies comatose the less favorable is the chance for the recovery. When the individual lies comatose for twenty-four hours, there is strong probability that he will remain so until the close. Such a duration is, however, not the rule. The patient generally recovers some degree of consciousness. Then, when he partially recovers, some motion is observed. At first the individual suffers from complete paralysis, because complete relaxation of all the muscles has taken place. When the cloud of the first shock has passed, the field clears away, and we can see what is left. Now, then, we observe the hemiplegia.

There is another factor upon which we base the prognosis, and that is the record obtained by the thermometer. The patient has fallen senseless; if you now put the thermometer, not under the arm, nor in the mouth, but in the rectum, above the sphincter, you will observe that the temperature has fallen, it may be on account of the shock, down two degrees, or to 97° or 97½°. Now, the longer the temperature remains down the graver is the case, for blood is being continually poured out, in all probability, and the patient must almost inevitably succumb. The temperature commonly comes quickly back to the normal point, and remains stationary a few hours, to then begin to ascend. In a favorable case it will not run up to above 100°; if it run up to 105°, the patient will die. The sooner the record returns to about the normal temperature, the better the chances for recovery. So here we

have evidence, most valuable evidence, offered to him who will read it, throughout the earliest and most anxious hours of the attack.

In this case we have another factor of great prognostic value, viz., this rigidity on the right side of the body. This is a sign unfavorable, not so far as life is concerned, but as regards the final restoration of the limb. This patient's life is, for the present, secure, but this rigidity, when it comes on so early, is usually followed by a secondary rigidity, which is lasting.

The patient has come up out of her comatose condition to some degree, but not fully and clearly. For two or three days after she came into the house she was continually moaning and crying. We do not look upon that as unfavorable, so far as life is concerned, but we do look upon it as unfavorable to the restoration of the mind. You would never say, when the patient has so recently come up out of the coma, that she must remain in this state forever, but when this stupefied, dazed condition lasts so long, the outlook for the state of the mind is unfavorable. Fortunately, all apoplectic strokes are not so grave as this; indeed, instances have been cited where individuals have recovered from such shocks with better brains than ever before. There was the great lexicographer, Samuel Johnson, who wrote the finest work of his life after an aphasic hemiplegia. But these are exceptional cases. The patients, however, in a majority of instances, recover some intelligence, to then gradually drift off into imbecility.

And now the question comes up as to the recovery of the use of the arm and leg. You will notice that not all the muscles of the side of the face are paralyzed. You may take the most absolute case of hemiplegia, and the whole face is seldom absolutely paralyzed. Indeed, the prognosis is better, in simple facial paralysis, when all the muscles of the face are paralyzed, for that means a peripheral paralysis, a paralysis caused, for instance, by the action of cold upon the ends of the nerves in the muscles, causing them to fail to transmit the nervous stimulus. In this case you will notice that the occipitofrontalis is not paralyzed at all; neither are the muscles about the eyelids, as the lines about their angles indicate their play. Here are paralyzed simply the muscles about the angle of the mouth and those of the cheek. As a result of this paralysis of the cheek the patient is sometimes compelled to take the fingers and lift the food out from between it and the teeth, in order to prevent its undergoing decomposition there. The neck is not paralyzed at all; the arm is always paralyzed more or less completely, and also the leg, but not to the same degree. But here are the muscles of the neck, ribs and abdomen scarcely affected at all. How will we account for their exemption? Well, we look at the distribution of the nerves to these parts. We observe that the arm and leg can be moved independent of each other. The arms are independent absolutely, though the legs are mostly moved in concert. But the eyes move together. What does that mean? Why, of course, there must be commissural fibres in the brain or spinal cord, in cases of concerted movement, and we will find those muscles that act in unison responding, be-

cause they still receive some nervous stimulus from the side of the brain not affected—receive it through the commissural fibres. The muscles of the eyes, ribs and abdomen move thus in unison in health, and in hemiplegia the affected side still receives nervous influence through the commissures from the side which still is sound. Thus the muscles of the arm and leg may be completely paralyzed, while those of the eye, etc., are not.

Now, I have said the hemorrhage may occur anywhere; at the cortex, at the base, or in the centre of the brain. Where did it occur in this case? If you see a patient with a great amount of emotional disturbance, you may infer that it has occurred in the medulla oblongata or the pons. But it is almost impossible, at first, to say what symptoms depend upon direct pressure and what upon indirect effects, as upon general disturbance of the circulation and shock. We would infer, from the complete paralysis in this case, that a large amount of blood has been poured out. The patient was in a comatose condition for a day or two after she was brought into the house. There has been no convulsive movements, no twitchings of muscles, no agitation of members. It does not look as if the meninges were affected in this case. It looks as if there had been a large hemorrhage into the substance of, or about the opto-striate bodies, the most frequent seat of hemorrhage in the brain. Other factors that speak for this localization are the very slight implication of the face and the very pronounced early rigidity of the arm and leg. At the same time it must be said that no one can absolutely and definitely localize a lesion in the brain in a perfectly recent case.

When this patient recovers, how much will she recover, and what muscles will recover first? Those which suffer least recover first and most. She will recover the use of her leg to a great degree before that of her arm at all, and why? Because the leg receives more nerve force by commissural fibres from the other side. Long after she will be able to go about the arm may still swing helpless at her side. But she may never recover perfect use of her leg. It will long be swung into place, in walking, rather than be lifted and pushed in advance. We come to the muscles of expression last, and as a rule, they recover last.

Now, so far as the life of the patient is concerned, there is little danger, except from repeated hemorrhage. This blood clot will be, in a large degree, absorbed, and the pressure thus relieved. A scar may be found in this brain by some future observer, but the permanent damage that may be left time, the great diagnosticator, can alone determine.

We should not dismiss this subject without at least mention of that variety of apoplexy in which a stroke occurs, and the patient gets up and goes about his business in a few hours, or even less. It was formerly thought that these cases were due to serum effused into the brain, but the conception is absurd. Such strokes are due to sudden spasmodic closure of the vessels. The arteries suffer sudden spasmodic contraction, shut down upon, in this way, and cut off, the circulation. The flow of fresh blood must

be continuous through the brain, or its functions are suspended. Now, it sometimes happens that a sudden discharge of nerve force, like a discharge from a Leyden jar, runs down upon the cerebral vaso-motor nerves, and the patient falls with apoplexy. These are the cases more especially of inherent instability of the nervous system, a fault in the original construction of the individual, as determined by heredity.

MEDICAL SOCIETIES.

THE INTERNATIONAL MEDICAL CONGRESS.

The Congress met at Amsterdam, on September 7th, Professor Donders, of Utrecht, President, in the chair.

Prof. Donders' Address

turned largely on the relations of psychical phenomena to physiology, and on the doctrine of evolution. Of the former he said—

Let us enter deeply into the question. Given a thorough knowledge of the atoms, their number, relation to each other, movements—and I do not think this at all inaccessible—the psychical phenomenon, viz., consciousness, appears, without the aid of any intermediate agency, as a phenomenon *sui generis*, which is not contained either in matter or in movement. In short, it is a phenomenon that can only reveal itself to itself; in short, an inexplicable and unexplained phenomenon. What have we gained by attributing a psychical element to the atoms? The psychical element of the atom remains to us just as little known as the psychical element of the complex matter. In order to explain or understand a phenomenon, we must be able either to connect it with other well known phenomena, or to trace it back to some notion which can be grasped by our intellect, such as the notion of matter and movement, which are contained in the idea of space. To embrace the theory of monism because we fail to grasp the relations of the psychical phenomena, is merely an act of faith.

In regard to evolution, he said—

If the evolution theory rely on morphology for support, physiology alone is able to penetrate into the conditions of development, and to explain, from the causal point of view, those three great factors of harmonious evolution; viz., habit, exercise and heredity, and the tendency to variation which seems to spring from them. Every organ and every function becomes the object of questions on origin and development, and we are justified in expecting from physiology that it will realize more and more that it is its duty to elucidate them.

On this ground the doctrine of evolution and of psychical processes meet. From the point of view of the former the origin of our notions appears under a new aspect. The possibility has vanished that, at the time of creation, they were implanted into each species; and it is our duty to explain their origin. This explanation can only be found in experiments on the senses and the voluntary movements. Concerning the abstract ideas and the mathematical axioms, the

greatest mathematical thinkers of our time have attributed to them an empiric origin. It remains now for us to determine how much can be attributed to individual experiences and to race, of the origin of our notions. This is a serious question, which I have considered more than once in the course of thirty years, but of which I will not speak here. It suffices to recall that, in order to explain the origin of our thoughts, we are obliged to admit the combined action of our individual experience and of that of our ancestors, as it has been transmitted to us by heredity in the peculiar dispositions of our brain. Even in man, individual experience does not suffice to explain the development of ideas as we see it after the human being has been born.

Prof. Chauveau, of Lyons, read on infectious diseases, which was followed by a paper on

Bright's Disease,

by Prof. Rosenstein, of Leyden. His conclusions were—

1. The anatomical changes in the kidneys, which form the foundation of the disease that was first described by Bright, affect both the parenchyma and the connective tissue of the kidneys.
2. There cannot be properly said to exist strictly parenchymatous nephritis or strictly interstitial nephritis. It has been sufficiently demonstrated by experiments and clinical observation that in every case of diffuse inflammation of the kidneys, both histological elements are affected.
3. Diffuse inflammation always leads to certain pathological changes in this organ, known as white kidney and red granular kidney. Both may finally develop into the "atrophic kidney," the only difference being that in the former the parenchymatous tissue of the kidney is chiefly affected, and in the latter the interstitial tissue.
- Both varieties may be distinguished clinically by analyzing the urine. The symptoms of atrophy are common to both forms.
4. Clinical observations tend to show that the red granular kidney, or, as it is now called, primary cirrhosis of the kidneys, is preceded by a period of tumefaction. The assertion is confirmed by anatomo-pathological observations.
5. The description given by Bright relates principally to the white granular kidney. Here, as well as in the other variety, the morbid process passes through two stages, as has been shown both clinically and anatomically.

Dr. Chervin, of Paris, read

On Stammering,

Dwelling especially upon its causes and treatment. The majority of the theories broached as to its nature make it a spasmodic affection, involving all the lingual muscles, according to some; the genio-glossi only, according to others; others, again, referring it to spasm of the upper respiratory passages. These theories, based on no solid foundation, have led to disastrous surgical practice, e.g., section of the base of the tongue, of the genio-glossi, of the hypoglossal nerve, removal of the tonsils, etc. The author considered stammering to be simply a want of coördination in the multiple acts necessary for speech. Methodical treatment, carried on for three weeks, is generally attended with success. For the first week the stammerer is forbidden to

speak, except at definite times set apart for practice in reading and recitation. During the second week he is allowed to speak, but carefully watched, so that he is made to articulate every syllable slowly and distinctly. Then he is permitted to speak a little more rapidly, and at the end of the third week he is cured of his fault.

Mr. Marcowitz, of Bucharest, communicated the results of his observation on the

Treatment of Abdominal and Peticial Typhus by the Douche,

which he contrasted favorably, as regards its anti-pyrexial effects, with the cold bath. He believed that the shock of the douche was useful; that it acted in a reflex manner on the heat-regulating centres, upon which it seemed to have a stimulating effect, thereby continuing the good already obtained by the subtraction of heat. The only contra-indications to its use were those insisted on by Liebermeister as to the cold bath, viz.: intestinal hemorrhage, and a high degree of cardiac failure, as indicated by a small and feeble pulse. Pulmonary engorgement, save when it is due to cardiac weakness, is regarded as an indication for this measure, rather than the contrary.

In the Surgical Section, among other papers, M. Verneuil spoke on

Operations in the Subjects of Constitutional Disease.

His propositions were: 1st. Surgical operations are not positively contra-indicated in subjects attacked with constitutional disease, but they were often permissible, frequently useful, and occasionally indispensable. 2d. Their prognosis is always much more serious than in healthy subjects. 3d. Their prognosis varies, in the first place, according to the differences in constitutional disease, and for each of them considered separately, according as the diathesis belongs to a dyscrasic state, or as it is induced by lesions anatomically and chemically appreciable. 4th. Special medical treatment, directed to the constitutional disease, should be entered on during, after, or, if possible, before the surgical operation. 5th. A knowledge of the pathogeny, pathology, and the natural evolution and termination of constitutional diseases, not, perhaps, sufficiently possessed by surgeons, is of great importance. It serves to deter more than to incite to surgical measures, and increases confidence in the remedial efforts of nature, seconded by a comparatively mild therapeutics. 6th. Operations on such patients, although more generally palliative than curative, are, nevertheless, of great utility. In extreme cases they may prolong life, render it less painful, and for the patient, at least, they open the door of hope.

Professor Lister, who was much applauded, and received quite an ovation, spoke on the

Antiseptic Method,

chiefly with reference to the three following objections which had been raised to it. 1. Surgeons who disbelieve in the part played by germs have attacked the carbolic dressing on the ground of theory. If bacteria do not exist around wounds, or, at least, if they do not possess the

evil properties attributed to them, a dressing which aims at preventing the development of these bacteria has no *raison d'être*. 2. That the antiseptic dressing with carbolic acid is not free from dangers, and may produce poisoning. 3. That if good results are obtained by the Listerian method, the same results may be had by means of other modes of wound-dressing. To the first of these objections Mr. Lister replied shortly, that he believes in germs and their deadly rôle, but declined to enter into a theoretical discussion which would occupy so much time. To the second objection he admitted that in a certain number of cases he had observed symptoms due to carbolic acid poisoning, both local and general. Locally carbolic acid produces irritation of the wound. When absorbed it leads, in some patients, to loss of appetite, vomiting, general weakness; death had even been seen to be occasioned by it. But all these accidents are very rare, and, moreover, they may readily be prevented. He avoids local irritation by not washing the wounds, as many surgeons do. The general toxic effects are readily prevented by employing carbolic acid of good quality, and carefully watching the patients, so as to leave off the acid as soon as these symptoms appear. He had not had very good results from the use of boracic acid, thymol, and salicylic acid as substitutes for carbolic acid. On the third head Mr. Lister said that those who object to use the carbolic method because as good results are obtained by other modes of dressing, do not know what may be done by means of the former. The largest and deepest abscesses may be opened with impunity; large joints may be laid open, etc. He submitted for adoption by the Congress the proposition that the principle of antiseptic dressing is fully justified, and that the means which we have of realizing this dressing are quite sufficient.

Prof. W. P. Tilanus, of Amsterdam, read on

The Radical Treatment of Hernia.

The conclusions were as follows:—1. Very favorable results have been obtained by the radical treatment of hernia; viz., ligature of the neck of the sac, extirpation of the sac, suture of the opening, with antiseptic precautions. The treatment is not dangerous, and has in most cases given good results. 2. Operation for hernia is indicated only in cases where the hernia cannot be kept *in situ* by a truss.

In the Section on Obstetrics and Gynecology, of a number of papers read the following may be specified:—

On the Treatment of Uterine Fibromas,

by Dr. J. De La Faille (Leeuwarden). The following were the conclusions:—1. The treatment of uterine fibromata is principally determined by the hemorrhage. 2. The treatment must be modified with respect to the size and seat of the tumor. 3. Internal medication is seldom successful, though it may be tried in cases of intraparietal fibromata. The same may be said of alkaline baths. 4. A very rational treatment of intraparietal fibromata consists in subcutaneous injections of ergot. 5. The usual method of dilating the uterus, by means of sponge tents or laminaria tents, is dangerous. It is important

that the tents should be frequently renewed. 6. Fibrous polypes ought always to be removed with the *écraseur*. 7. Intra-uterine fibromata are best removed by enucleation. The same may be said of the subperitoneal fibromata. 8. In cases of gastro-hysterotomy, the intraperitoneal treatment of the pedicle is preferable to the extraperitoneal treatment. 9. The extirpation of the uterus *in toto* is preferable to the partial excision of the organ. 10. Ovariectomy is very seldom indicated in fibrous tumors of the womb.

Prophylactic Treatment of Puerperal Fever,

by Professor Halbertsma (Utrecht). The conclusions were as follows:—1. The principal causes of puerperal fevers are—*a.* abnormal births; *b.* infection; *c.* atmospheric conditions. 2. The prophylactic treatment consists—*a.* in premature delivery before symptoms of endometritis set in; *b.* in not examining the woman *per vaginam* in cases of normal birth; *c.* in antiseptic treatment; *d.* in stimulating the contractions of the uterus after confinement by giving ergot. 3. The danger of contracting puerperal fever may be as great in private dwellings as in lying-in hospitals.

On the Effect of Pilocarpine, Eserine, Etc., on the Uterus,

by Dr. Van Der Mey (Amsterdam). The conclusions were these: 1. The subcutaneous or intravenous injection of a solution of hydrochlorate of pilocarpine made during pregnancy excites the uterus to contract. If the injection be given in the first stages of labor, it stimulates the uterine contractions. 2. The action of sulphate of eserine on the pregnant womb is very similar to that of hydrochlorate of pilocarpine. 3. It has been proved, by clinical experience and experiments on animals, that the action of hydrochlorate of pilocarpine in inducing premature labor has been much exaggerated. 4. If combined with the mechanical means for the induction of premature labor, pilocarpine may be found useful. 5. In cases of normal labor, where the uterine contractions are not strong enough, pilocarpine may be administered successfully. 6. It must not be used for the purpose of stopping *post-partum* hemorrhage.

The Sections of Physiology, Psychiatry, Pharmacology, and State Medicine, were well represented.

We close our abstracts with notices of a few of the more practically important papers from the Sections of Ophthalmology and Otology.

On Myotic and Mydriatic Agents,

by Prof. Doyer (Leiden). The following were the conclusions: 1. Notwithstanding the direct relation which exists between the size of the pupil and the power of accommodation, both functions are independent of each other. 2. It has been shown, by comparing the results obtained by different experiments, that the dilatatory effects of pilocarpine, eserine, gelsemine, atropine, elatrine, and duboisine, are in the proportion of $\frac{1}{25}$, $\frac{1}{10}$, $\frac{1}{5}$, 1, 2, 15. 3. The smallest dose of duboisine that has any effect upon the pupil is 0.00000005 gram.

On Antiseptic Dressing in Operations on the Eye,
by Professor H. Snellen (Utrecht). The following were the conclusions: 1. Suppuration following operations on the eye is an analogous process to suppurations after cutaneous operations. For this reason, antiseptic measures, which are modified according to circumstances, would have the same prophylactic importance. 2. No operation on the cornea ought to be undertaken without having previously thoroughly cleansed, with a one per cent. solution of carbolic acid, the part which is to be operated upon, as well as everything that can possibly come in contact with it. The instruments must be cleansed with alcohol. 3. As it is almost impossible to use Lister's spray in operations on the cornea, a current of air purified with carbolic acid may be substituted in its stead. 4. Rags dipped in purified vaseline and purified cotton wool will prove a sufficient dressing, both for antiseptic purposes, as well as to keep out the air. No irritating antiseptic means that might eventually increase the secretions of the conjunctiva and the glands of the eyelids must be employed.

On Sympathetic Irido-Choroiditis,

by Professor MacGillavry (Leyden). The following were the conclusions: 1. In ascribing the origin of sympathetic irido-choroiditis to an irritation of the ciliary nerves in the eye which is the seat of the primary affection, the hypothesis is implicitly admitted that inflammation may be caused by a reflex action. 2. This assertion, however, is not based on any facts in pathology which might lead to it. 3. It has been shown by anatomical observations that in sympathetic irido-choroiditis the lymphatic space between the dura mater and the arachnoids is filled with conglomerations of lymphoid cells. 4. We have reason to believe that these conglomerations take a part in causing the inflammation of the second eye.

On Adenoid Tumors in the Naso-pharyngeal Cavity,

by Professor Dayer (Leyden). The following were the conclusions: 1. Adenoid tumors in the naso-pharyngeal cavity give rise to a series of disturbances, the cause of which has frequently been misunderstood in the functions of respiration, speech and hearing. These troubles can only be cured in the majority of cases by removing the tumors. 2. Breathing through the mouth must not be considered merely as the effect of tumors or of a simple catarrhal swelling in the naso-pharyngeal cavity. When that habit has once been contracted, it becomes one of the principal causes of the further development or recurrence of the said tumors. 3. The best method of operating on adenoid tumors consists in crushing and removing them with the nails. This method is by far preferable to the use of instruments, and can be applied even in very young children.

On the Different Methods of Determining the Auditory Range,

by Dr. A. Magnus (Königsberg). The following were the conclusions: 1. In judging the usefulness of the methods by which the auditory range

can be tested, the object of the test must always be kept in view, not an ideal object. No apparatus has as yet been invented that could be used for all tests. 2. As far as the auditory perception of irregular sounds (noises) is concerned, each ear may be tested individually. This would hardly be feasible for the regular waves of sound (music). 3. In making a medical diagnosis, such methods must be applied by means of which we can compare the auditory range for sounds that are transmitted through the air with that for sounds that are transmitted through the bones of the skull. 4. In order to enable the physician to make a prognosis and to control the treatment, he must use instruments which produce sounds of the same intensity (Politzer's apparatus, a watch). 5. A watch with an inhibitory apparatus would be the best instrument for a medical examination. 6. All the methods by means of which auditory range can be tested possess only a relative importance, owing to subjective influences (the degree of attention, age, intelligence), or to objective influences (any noise or sound which may exist during the examination, the locality, etc.). 7. Every physician must fix upon a normal distance for hearing, according to the circumstances under which he operates. If he regard this normal distance as a unity, he may express the results of his experiments as fractions of this unity.

On Diseases of the Ear in Relation to Life Policies,

by Dr. J. Patterson Cassells (Glasgow). The following were the conclusions: 1. It would be both arbitrary and unjust to look upon all cases of deafness and otorrhea as being alike, and to refuse them. It has not at all been proved that diseases of the ear tend to shorten the medium duration of life in general. 2. All persons who wish to assure their lives must be questioned, especially as to the past and present state of their ears. 3. Persons who have been suffering from some disease of the ears, or are still so, must be examined by a specialist. 4. This is done with a view to estimate the danger which their life may incur through this affection. Accordingly, they must be classified as good, doubtful, dangerous, very dangerous. This classification will depend—(a) on the nature and the gravity of the affection; (b) on the present and past condition of their general constitution. 5. Persons suffering from some affections of the ear may be accepted, if their general health be good and free from all constitutional affection; also when there is no complication. All those must be refused where the otorrhea is caused by an exanthematic fever, or if the persons be scrofulous or syphilitic; also all cases of singing in the ears, with or without deafness, where the gait is unsteady; lastly, all cases where the singing in the ears, whether accompanied by deafness or not, is complicated by a syphilitic constitution.

Drs. L. A. Sayre, of New York, Laurence Turnbull, of Philadelphia, and other Americans, were present, and were treated with great courtesy, the first named especially receiving marked attention.

EDITORIAL DEPARTMENT.

PERISCOPE.

The Value of the Hypophosphites in Phthisis.

Dr. J. G. S. Coghill writes an article on this subject, in the *Lancet*, September 6th, giving his experience in 100 cases of phthisis. His formula was—

R. Sodii. hypophosphitis,
Calci. hypophosphitis, aa gr. viij
Infusi. cascariellæ, f. ʒj.

Sig.—For one dose twice daily, after meals.

He gives details, and concludes as follows:—

A fair way to arrive at a true estimate of the hypophosphite treatment is to compare its general results with those of treatment of the whole body of the patients treated in the hospital during the same year. This is a comparison favoring the hypophosphites, as 25 per cent. of the total deaths occurred shortly after admission, the patients being in such a rapidly advancing state of disease as to preclude all attempts at systematic treatment; besides, in no case were the hypophosphites administered in which the prognosis was positively hopeless; also, when non-success was demonstrated the treatment was changed.

Of the total patients treated in the hospital during the year—viz., 428—297 improved, 56 remained *in statu quo*, 51 got worse, and 24 died.

Of those treated by hypophosphites—viz., 100—57 improved, 17 remained *in statu quo*, 26 got worse, and 4 died.

It seems evident from these statistics that the hypophosphites have no claim whatever to the character or properties of a specific remedy in the developed stages of pulmonary consumption.

In only 25 per cent. of the cases could they be employed, unaided, and these were cases that would probably have shown good results from favorable change of climate, improved dietetic and hygienic conditions, with general tonic treatment. Great disappointment resulted from its impotency in checking such characteristic symptoms of the disease as night sweats, or influencing favorably the febrile conditions indicating advancing lung mischief.

That, however, these salts, when judiciously employed, have valuable tonic properties, promoting the appetite, the digestion, and the assimilation, more especially of fatty food, was strongly impressed on all who closely watched the effects of their administration. They have evidently strong pyrogenic or heat-producing properties, acting, indeed, on the system, like phosphorus itself. This is especially the character of the hypophosphite of iron, which, indeed, renders it a very dangerous remedy in the arrested forms of the disease. These properties contraindicate their employment in advancing stages of phthisis, where there is high temperature and increased frequency of pulse. But when the disease is arrested, they come into favorable consideration as a means of stimulating the nervous system, and through it the subordinate processes of nutrition. The feeling of

languor and lassitude so often complained of by the consumptive seems often greatly relieved, and unquestionably they have valuable weight-making properties. They have certainly no specific influences (so far as I have been able, after the most careful and unbiased observation, to form an opinion), either in arresting when in progress, or markedly promoting repair when stayed, the several forms of pulmonary phthisis, whether tubercular or pneumonic.

To say that they have a specifically curative influence on the diathesis, and not on the lesion, is to relegate the hypophosphites to the category of a large number of general tonic remedies, of the good effects of which there is long, ample, and well founded experience. On the other hand, it is greatly to be regretted that the hypophosphites of lime and soda, more particularly, should have claimed for them, in terms of extravagant laudation, the character of a specific in pulmonary consumption, which they do not seem to possess, and which much-to-be-deprecated proceeding has, no doubt, largely contributed to their being regarded with suspicion, and to their undoubted properties as general or nerve tonics, perhaps even as tissue builders, being overlooked. As such they will certainly be found of great value in certain stages of treatment in appropriate cases. Indeed, this their legitimate use is very largely and increasingly recognized by the profession, and they are, with the lactophosphates of lime and iron, perhaps, the best general tonics, both in cases of incipient consumption and in the more advanced stages of that disease, when the progress of the disease has been arrested.

Case of Hepatic Colic Attended with Passage of Gall-Stones Cured with Muric Acid.

The following case is given by W. H. Mussey, M.D., Professor of Surgery, Miami Medical College, in the Cincinnati *Lancet and Clinic*, September 27th:—

Mrs. B., aged 42, consulted me May 31st, 1877, with the following history: for the last ten years has had paroxysms of intense suffering in the right hypochondrium, attended with jaundice, and their real nature not understood till three years since, when a large quantity of gall-stones were discharged with the feces. At first there was six months' interval in the attacks, then four, then three, two, and during the last year only one month between the attacks, and occasionally there would be three attacks in one month.

The gall-stones varied in size and number, sometimes one large one, and at others, three large ones and several small ones.

The paroxysms would last from four to eight hours, followed with confinement to bed for several days, the recovery from them each succeeding year becoming more tedious and protracted.

For five years last past has been unable to keep up about the house. The catamenia irregular, appearing only three times in the last ten months.

Present Condition.—Skin intensely yellow,

great emaciation of the body, weight 100 pounds, when at the period of first attack she weighed 170 pounds, strength exhausted, cannot walk without support by others, and cannot step upon any elevation above the level of the floor.

I prescribed pure muriatic acid, four drops in water, every six hours. Pepsin, eight grains, after food. Fluid extract conium, ten drops in water, every hour, during the paroxysms of pain and passage of calculi.

June 27th. Patient reports herself very much improved. The pepsin was discontinued and the acid continued in the original quantity.

November 23d, 1877. Mrs. B. reports only one attack since May 31st, which commenced June 20th and lasted to July 25th, during which time she was confined to bed; in the course of this paroxysm she passed no hard stones, but hundreds and perhaps thousands of perfectly formed soft ones, and which crumbled to a powder on being touched. Health reasonably good and bowels regular. Has continued the acid as first ordered, i.e., four drops four times a day, and is advised to continue the medicine once a day.

June 14th, 1878. Mrs. B. walked into my office with a firm step. I did not recognize her florid countenance and *embonpoint*; she weighs 170 pounds, a gain of seventy pounds since I last saw her. All the secretions and functions of organs are normal, and there has been no recurrence of paroxysms.

November 5th, 1878. Reports good health. No paroxysms since July 25th, 1877. Weighs 170 pounds. Still takes the acid once a day, for "fear." Has taken four ounces, by measure, of pure muriatic acid.

Weight, 1867, 165 pounds; May 31st, 1877, 100 pounds; November 5th, 1878, 165 pounds. Is cured, grateful and happy.

Hypodermic Use of Fowler's Solution in Chorea.

Dr. Perroud, lecturer on diseases of children in the Lyons Faculty, has treated cases of chorea, since 1875, by hypodermic injections of arsenic, and M. Gavin, in a recent *Thesis*, gives an account of thirty-three of the cases so treated. Four or five drops of pure Fowler's solution are injected by means of a Pravaz syringe, the region chosen being that where the cellular tissue is least dense and the nervous filaments are fewest. Generally an injection is practiced every second or third day. All the cases were females, aged from six months to fourteen years, and among them were examples of all the forms of chorea. This method is stated to be preferable, because it avoids all gastric disturbance, and the cure is generally obtained more rapidly, while the dose is very small. There is little or no local irritation induced; but in some cases intolerance of arsenic occurs, although this is rare in children. As a general rule, rapid amelioration occurs, flesh being at the same time gained, while the solid matters secreted by the kidneys diminish. In sixteen of the cases the chorea was cured after a mean duration of thirty-two days of treatment, about eighteen injections having been employed. Of thirteen others submitted to these injections, but to various other modes of treatment as well, ten recovered, a longer period,

however, being required. These thirteen cases were almost all of them old or relapsed choreas, so that, contrary to the assertions of Aran, Ziemssen, and others, arsenic seems to succeed better in recent and simple than in old and inveterate cases.

REVIEWS AND BOOK NOTICES.

NOTES ON CURRENT MEDICAL LITERATURE.

—We take pleasure in announcing that Dr. Atkinson's new work, "*The Therapeutics of Gynecology and Obstetrics*," is now in press, and will be ready by the close of the year. It is on the same plan as Napheys' *Therapeutics*, and will give a succinct and full description of the most approved forms of gynecological and obstetrical therapeutics.

—The Fisk Fund Prize Essays awarded by the Rhode Island Medical Society include one on the "Artificial Feeding of Infants," by Dr. Oliver C. Wiggins; and one on *Cholera Infantum*, by Dr. Charles E. Banks. They are both carefully prepared essays, although presenting little that is new to the reader.

BOOK NOTICES.

The Medical and Surgical History of the Rebellion.

Part II. Vol. I. Medical History. Washington. 8vo. 1879.

The whole of this huge volume of nearly 900 large quarto pages treats of diarrhoea and dysentery; or, as the editor, Dr. J. J. Woodward, calls them, the *Alvine Fluxes*. It is richly illustrated with photographs and engravings, and filled with interesting details of the vast varieties of those diseases which appeared in the army. It would be impossible to give an analysis of the work in the space at our disposal. We must say, however, that from the examination we have been able to give it, it is as thorough and masterly in execution as it is detailed and exhaustive in design. It were an error to suppose it merely a treatise on these diseases as they appeared in the late war; on the contrary, it examines them in all their relations and prominent examples, as recorded in the history of medicine over the whole earth and from the remotest times. Nothing, probably, of any importance has escaped the researches of Dr. Woodward; and it is to the credit of the nation as well as to himself that such a monument of enlightened industry has been issued from the press of the general government.

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A WEEKLY JOURNAL,
 Issued every Saturday.

D. G. BRINTON, M.D., EDITOR.

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NUTRITION AND INANITION.

The general relations of food to life have been pretty definitely settled. The physiological needs of the adult human body, according to all scientific investigators, necessitate the expenditure of from 140 to 180 grains of nitrogen in twenty-four hours, *while the body is in a state of rest*. In ordinary labor about 300 grains of nitrogen will be excreted, and under great physical exertion, such as that of walking for many hours consecutively, from 500 to 600 grains.

But to say that this average indicates an invariable rule would be widely wrong. In Dr. HAMMOND's sound little book on "Fasting Girls" he observes, "Hysteria is very frequently marked not only by the ability to endure lengthened periods of abstinence, but by the abolition of all desire for food, to such an extent that the sight or even the idea of aliment of any kind excites loathing and disgust." He cites a case in his own practice, where a young lady for twenty-nine days took nothing but a single cup of chocolate daily, and lived through it and recovered.

Nor is it necessary that the hysterical condition should be present. A case was widely copied in the press last year, in which a stowaway secreted himself in the hold of a vessel at Liverpool, and had nothing to eat or drink during the whole voyage to New York, from September 24th to October 4th, but two handfuls of salt which he found in the hold, and his own urine, which he passed in a flask he had with him and drank each time he voided it. When the vessel reached New York he was found greatly emaciated, insensible, cold and nearly pulseless, but rallied, and was convalescent after five days.

The statement has been repeatedly made that East Indian necromancers will allow themselves to be walled up for a month in a small cell, without food or water, and yet can be restored after this incredible abstinence. They undergo a prolonged secret preparation and a protracted restoration at the hands of their assistants. This has been said to be a trick, but, if so, the trick has not been discovered. It is not more wonderful than that R. Kelsey lived fifty-three days on less than a pint of water daily, a fact vouched for by Dr. JAMES McNAUGHTON, of New York.

In the lower animals this power of living without aliment is well marked. JOHN HUNTER asserts somewhere that he was cognizant of a toad which had been kept one year without food, and survived. Dr. C. H. HUGHES, of St. Louis, relates, in a recent paper read before the St. Louis Medical Society, the instance of a hog that lived in winter, snowed in under a stack of straw for forty-six days, without food or water, and without eating or disturbing the straw about him, and came out, thin indeed, but in good health. Dr. Hughes observes on this subject—

"It is my opinion that the more this subject is looked into the more will be found to sustain the view that, when food deprivation is entirely self-imposed and voluntary, general disintegration reduced to a very low degree, and no disease existing, save just sufficient in the cerebral cortex to induce the morbid display of volition with reference to alimentation, life may be prolonged, by the necessarily very moderate daily demand on the reserve force of the system, to a much longer period than we have been generally willing to concede possible."

The study of the phenomena of hibernation

and aestivation—the prolonged sleep of animals in the cold seasons of the temperate and dry seasons of the torrid zone—may throw some light on these facts. They have been defined as the result of “a simultaneous modification of the innervation and circulation under the influence of a low temperature, or of a deprivation of moisture.”

It is well known that many animals of high physical organization pass apparently voluntarily into this state of trance, and remain for weeks and months wholly without food or drink. With cold-blooded animals and invertebrates, it is still more common. With these numerous examples around us, there is no room for surprise that occasionally, and under exceptional circumstances, the same power is exhibited by the human race. That it is exceptional, is only too clearly shown by the frightful histories of famine and starvation which are scattered up and down the pages of history.

NOTES AND COMMENTS.

Therapeutical Notes.

BISMUTH IN CHOLERA INFANTUM.

At a meeting of the Madison county, Ill., Medical Society (St. Louis *Medical and Surgical Journal*, September), Dr. H. T. Yerkes warned against astringents in this disease. He thinks a rational treatment consists in allaying irritability of the ganglionic nerve centres, and by the use of such remedies as promote digestion and allay irritation of the gastro-intestinal surfaces. For this purpose he has found nothing to act better than either the sub-carbonate or sub-nitrate of bismuth in large doses, combined with pepsin, and if indicated, with an anodyne and aromatics.

SULPHURIC ACID IN CHOLERA.

Dr. MacCormac, of Belfast, who had great experience in cholera in India, has urged on the English government the prophylactic treatment by dilute sulphuric acid—

R. Acidi sulphurici, gtt.vj
Aque, 3j. M.

Sig.—This amount in a cup of mint water once or twice daily.

Both in India and in the United States this has proved itself the best known prophylactic.

THE SENECIO AUREUS IN RHEUMATISM.

For removing the rheumatic diathesis, Dr. N.

S. Davis (Chicago *Medical Journal and Examiner*, September,) extols the life-root plant, *senecio aureus*. In a typical case of chronic rheumatic carditis he prescribes—

R. Acid carbolic (crystal), 0 | 40 grams.
Glycerine (pure), 16 | 00 “
Tinct. gelsemium, 16 | 00 “
Tinc. digitalis, 32 | 00 “
Fl. ext. senecio au., 96 | 00 “ M.

Sig.—Give five grams, or an ordinary teaspoonful, in a little water, just before each meal and at bedtime.

The steady use of this, with due attention to diet and exercise, and the avoidance of all use of alcoholic drinks and tobacco, will probably do as much to counteract the rheumatic diathesis, regulate the action of the heart, improve digestion, and thereby prolong the life and usefulness of the patient, as any course of treatment we could suggest.

SUDORIFIC IN REMITTENTS.

In remittent fever, Dr. E. A. Glezen, of Indiana, says (Ohio *Medical Recorder*, June) that a favorite prescription with him is the following:—

R. Nitrate of potash, 3ij
Powdered ipecac., gr.xx
Fl. ext. ginger, m.xx
Water, 3vj. M.

Sig.—A tablespoonful every hour, until sweating is fully established; then from 5 to 10 grains of quinine every three hours.

In cases accompanied with prominent head symptoms, it is proper to commence the treatment with an active cathartic; otherwise it should be avoided, as tending to prevent a crisis by the skin.

Nervous Maladies of Uncultivated People.

In curious confirmation of the strictures we made on the theory advocated by Dr. G. M. Beard and others, that increasing culture entails increase in nervous maladies, is a paper published in *La Presse Med. Belge*, August 31st, from the pen of Dr. Wilmart, on the character of the peasantry of Central Russia. They are, he says, of the middle height and below this. They are of very nervous temperament, of slight endurance, passing rapidly from enthusiasm to discouragement. They will not submit to the slightest operation without chloroform; they can bear only small doses of medicine, and even slight inflammatory affections are soon complicated by delirium, convulsions, etc. Steeped in ignorance, and possessed of little power of moral resistance, they readily abandon themselves to the deepest melancholy, easily yielding to the impulse to suicide, especially by drowning.

Among the diseases of the peasantry, those of the nervous system hold the first rank, hysteriform neuroses prevailing equally among men and women. Pain is a prominent symptom, and large quantities of opium are taken for its relief. Anæmia is very prevalent, especially among females.

Hydrophobia in Rabbits.

The *Lancet* notices some interesting facts regarding rabies, ascertained by M. Galtier. Canine rabies is transmissible to the rabbit, which becomes a convenient and inoffensive means of testing the virulence or non-virulence of different fluids of the body of a rabid animal. He has availed himself of this to study the virulence of the secretions of the rabid dog, sheep and rabbit. The rabies of the rabbit is transmissible to animals of its own species. He could not say whether the virus is as intense in the rabbit as in the dog. The predominant symptoms in the rabbit are paralysis and convulsions. The duration of life after the first manifestations of the disease is from a few hours to one, two three, and even four days after the disease has definitely declared itself. The period of incubation is shorter than in other animals, the average duration in twenty-five cases having been eighteen days. The administration of salicylic acid has no power to hinder the development of rabies in an inoculated animal. The saliva of a rabid dog, collected from the living animal and preserved in water, retains its virulence for twenty-four hours. Hence, the water in a trough in which the rabid dog has allowed its saliva to fall in trying to drink, must be regarded as virulent, at least for this length of time.

Brown-Séquard's Theories of the Nervous System.

This eminent teacher continues to announce that his experiments and researches prove that the doctrines of cerebral localization are erroneous and based on false assumptions. His demonstrations are striking. Thus, in an animal in which the right motor half of the pons varolii was incompletely divided, the left half of the bulb was afterward cut through, there remained no other way of communication between the two halves of the encephalon than by a small portion of the anterior longitudinal mass of fibres on the right side of the protuberance. Now, in this case, the galvanization of the motor centres at the right and at the left caused exactly the same movements in the limbs of the side opposite to the centres. The experiment

was repeated a number of times, always giving the same results.

It is observed by M. Grasset that the whole doctrine of Prof. Brown-Séquard is governed by two entirely new principles, viz. :—

1. All the phenomena which one ascertains after limited experimental or clinical lesions of a part of the cerebrum are produced by action at a distance.

2. There are no agglomerated and circumscribed centres in the cerebrum for any function. There are certainly special cells, distinct elements, but these cells are distributed through the whole mass of the cerebrum. In other terms, there are no circumscribed, but diffuse centres.

Synthetic Production of Salicin.

The *American Journal of Pharmacy*, October, remarks that synthesis of a glucoside or glucose-yielding vegetable substance, is an important event in itself, as this had never been accomplished, but in this case it seems doubly important, as the method seems to be one capable of general application, and may lead to much greater results. A. Michael has just effected this synthesis in Wurtz' laboratory. Taking the so-called aceto-chlorhydroses, the product of the action of acetylchloride upon glucose, and acting with it upon potassium carbolate and potassium salicylate successively, two compounds were obtained, both of which showed the characters of glucosides. The first of these new substances does not appear to be found, as yet, in nature. Michael calls it *pheno-glucoside*. The second not only possesses the composition of helicin, an oxydation product of salicin, but examination shows it to be absolutely identical with the naturally derived product. The helicin, acted upon with nascent hydrogen, yields *salicin*, the glucoside of the willow.

Pilocarpin in Ophthalmic Practice.

After a careful study of this drug, Prof. Chalot, of Montpellier, doubts the value of it in ophthalmic cases. In his paper on the subject, after having observed that injections of this kind have not given any satisfactory results in uni- or bilateral hydrarthrosis, in simple hydrocele, or after amputations, the author proceeded to give the history of the use of pilocarpine in affections of the eye, and related several cases that had come under his notice in the service of M. Courty. In one case, where extraction of the cataract had been performed after von Gräfe's method, he injected chlorhydrate of pilocarpine; but,

another treatment having been carried on at the same time, he was unable to arrive at a definite conclusion on the subject. In another analogous case the patient became unconscious, and exhibited phenomena of intoxication after the fourth or fifth injection; that was the only result that had been obtained in this case. The same took place in four or five more cases of affections of the eyes that were treated in the same way. Patients, as a rule, do not tolerate these injections easily, and often object to them. They are frequently followed by symptoms of excitement, and in some cases of intoxication. There seem to exist no relations between the physiological and therapeutical effects of the drug, and no good results have ever been obtained.

Percentages from Druggists.

Our comments, some months back, on the impropriety of physicians taking percentages on the prescriptions they send to druggists, has met the approbation of many honorable men and journals. The *Chicago Pharmacist* speaks of the prevalence of the swindle in that city. It says—

"Many physicians in this city demand as high as forty per cent. on the gross price of their prescriptions to patients, while others are content with twenty-five per cent., and yet others only ask their office rent, while a goodly number only expect cigars and liquors free. Some degree of collusion between druggists and physicians exists almost everywhere, and probably always will, but the practice of giving any very substantial inducements to the physician for his influence is commercially and morally wrong."

How long shall this discreditable state of things last? Will not the medical societies take some action?

Active Principle of *Eriodyction Californicum*.

Apropos of Dr. Wilson's article on *Yerba Santa*, we note that at the last meeting of the National Pharmaceutical Society Mr. Charles Mohr, of Mobile, reported a very full examination of the plant, and the action of the various solvents in regard to the amount and quality of extractive matter. The properties are believed to be due chiefly to the resinous matter, which is best extracted by alcohol, to which it yields nearly eleven per cent. of its weight. It yields an ethereal extract of fifteen per cent. and an aqueous of nineteen per cent., but that which is taken up by alcohol seems more satisfactorily medicinal in its character.

Its apparent action is as an astringent and tonic to the bronchial tubes, but as a remedial agent in consumption he thinks it no better than many other panaceas whose uselessness was long ago proved.

Peritoneal Affections of Drunkards.

At the late meeting of the French Association for the Progress of Science, M. Leudet, of Rouen, read a paper on Affections of the Peritoneum in Drunkards. These consist—1. In gradually progressive ascites, which can only be cured by tapping and the administration of powerful cathartics, provided the mucous membrane of the intestines be healthy; 2. In a granular peritonitis, which in exceptional cases ends in the formation of adhesions between the serous membranes. In some cases the peritoneal cavity contains a bloody fluid, but never a purulent one. The aforesaid lesions progress very slowly and insidiously. M. Leudet thinks, too, that they are of a similar nature to the alterations produced by alcoholism, both in the liver (cirrhosis) and in the intestines (enteritis, ulcerations).

Intestinal Calculi.

It is not generally known that calculi form in the intestines in some instances, quite independent of gall stones or other formations. At the late meeting of the French Association for the Progress of Science, M. Marquis read a paper on the subject, in which he proceeded to give a case of intestinal lithiasis that had come under his notice. The patient was a very anæmic woman, who constantly passed in her stools small, granular, oblong, brownish bodies, which were evidently formed in the intestines, but were neither biliary nor renal calculi. There was simultaneously a considerable hyper-secretion of the intestinal mucus. It seemed as if the gravel were produced in greater quantities the more anæmic the patient became.

Capillary Punctures in Ascites.

M. Hemot, of Reims, read, at the French Association, an interesting communication on this subject. After having drawn attention to the danger which attends the practice of evacuating suddenly, in a case of ascites, a large quantity of liquid, and to the accidents to which this apparently mild operation frequently gives rise, he pointed out how little harm could result in such cases from capillary punctures. He quoted several cases in which five or six punctures, made at certain intervals from each other, gave the

desired result. The operation is extremely simple; the instruments used are merely a small trocar, such as every surgeon carries in his pocketbook, to which a rubber tube is adapted. Another important point in this method is that the abdominal walls do not lose their elasticity, which would be the case if the fluid were allowed to escape rapidly. In this way the rapid reproduction of the liquid is prevented.

CORRESPONDENCE.

Supposed Congestive Chills Caused by Lumbrici.

ED. MED. AND SURG. REPORTER:—

I was called September 19th, 1872, to see Mrs. B., aged 19, German. Had given birth to a well developed female child six weeks prior to my visit. I was informed she had a very easy labor, for a primipara; was up doing her house work in two weeks. Up to the day before I was sent for she had good health.

She was attacked with a light chill, which did not last long; fever followed, continuing for some hours; after it subsided she remained sick at the stomach. When I came she had no fever, but was weak; looked pale, eyes looked glassy, the extremities cold, and covered lightly with a clammy sweat. Tongue clean, bowels regular, temperature normal. Kidneys secreted natural. She gave plenty of nourishment to the infant, which was in a thriving condition. I looked upon the case as of a malarial character, and prescribed the usual remedies.

September 20th. Was sent for in great haste, the messenger stating the family thought she was dying. It was some time before I got there; when I did she was doing well, no fever, sweating over her entire body, temperature normal. Her husband told me she rested well all night; about noon he noticed she looked amiss, and went to the bed to ask her if she wanted anything, whereupon he found she was unconscious. She was cold as death, from head to foot, bathed with a clammy sweat. They sponged and rubbed her person for over an hour, with alcohol, before any signs of life appeared, except the slow beating of the heart, which an old lady still kept observing while the friends kept sponging and rubbing. Thinking she had had a congestive chill I prescribed accordingly, giving heroic doses of sulph. quiniæ and stimulants.

The next day, 21st, about the same time, she had another spell, similar but harder and longer continued. She took during the interval 3j of the sulph. quiniæ and ʒiv of brandy, besides nourishment, in plenty. I did not witness this one either. I found her in precisely the same condition as the day before. Thinking there was something connected with the case which I could not fathom, I requested the friends to get council; they acquiesced, and I sent for my friend, Dr. W. J. Stewart; he came early on the morning of September 23d; he examined the case thoroughly, but could not detect anything more than, as he supposed, remittent fever. We continued the

same line of treatment, giving all the directions necessary, and left, I promising to be there at noon; then found her comfortable; she had eaten with a relish; I watched her very closely; in about one hour after she ate her dinner she commenced to moan. She was pale as death, eyes open, staring toward the window, cold over her entire body and extremities, a clammy sweat exuding from the skin in a very profuse quantity, pulse very slow, temperature 95°, pupils about normal in size; could not get her to pay attention to anything whatever; would never change her position, never moved her eyes; no spasmodic action of any muscles, or twitching of the nerves. We used the same remedies as before, placing bottles of warm water along her body, jugs to her feet, filled with as warm water as was consistent. She did not appear to feel the heat or hard rubbing that was performed by the lady attendants. In the course of two hours she became rational and rested well; stated she was unaware of anything that transpired. Not knowing how to prevent, or even to mitigate, these attacks, I was at my wit's end, after giving the heroic remedies, and apparently of no avail. I again requested the friends to call council.

September 24th. Dr. R. Milligan, of Fort Recovery, Ohio, met me. He being the oldest physician in this part of the country, I considered he certainly would get a clue to this phenomena. I stated the entire history to him, and he examined her very carefully. While he was there she took one of those "sinking chills," as he called them, equal to any she had had. He told me that they were not congestive chills, but that they would have to be called that, in the absence of any other name. He suggested to pursue the same course. If that did not save her nothing would. I did as he directed for some three days, with the same results, only she was getting weaker each day. What surprised me the most was, she rested well every night, slept naturally, was comfortable in every respect, ate and relished her food, and gave sufficient nourishment for the infant, which grew finely. She passed urine sufficient in quantity all this time; bowels regular, of proper color and quantity.

On the evening of the 27th she told her mother-in-law she felt something in her throat, which, as she said, moved, and was alive. The old lady raised her head up, looked down her throat, and discovered a large lumbricoid, which she drew out. It measured thirteen inches. I arrived shortly after, and the old lady showed it to me. I discarded all the heroic doses we were giving, of antiperiodics, and left three powders, composed of santonine, hyd. chlor. mitis, of the usual dose, to be given two hours apart, to be followed, in the morning, with half an ounce of olei ricini, with twenty drops of turpentine, with the result that in four hours after she evacuated a solid knot of lumbrici, as near as we could count containing thirty-nine; there was nothing else passed. In about three hours she had another discharge from the bowels, which filled an ordinary chamber mug two-thirds full of living and dead worms, all of the lumbricia species. The amount surpassed anything I ever beheld, there was very little of anything

else. She kept passing a few nearly every discharge, for about a week. She commenced to improve at once. She had no chill that day, nor ever afterward. She made a good recovery in a very short time, and has been hearty ever since.

J. A. HUTCHINSON, M.D.

Salamonia, Ind.

Disinfectants.

ED. MED. AND SURG. REPORTER:—

All of our Dispensaries are silent, or nearly so, on the subject of disinfectants and deodorizers, which, I think, is a serious defect. The subject of sanitary precautions against the cause and spread of disease is daily attracting more and more the attention of the profession and the public, and some portion of our Dispensaries ought to be devoted to this subject. Even Buck's sanitary work, valuable as it is, does not go into this subject as minutely as it should; that is, though it mentions varieties of disinfectants and disorders in general terms, it does not tell us accurately how to prepare them, and how and in what quantities to use them. For instance, if it says Condy's Fluid, it does not tell how to use it, and it is not mentioned in the index of that work. All do not know that it is permanganate of potassa. Strange as it may appear, most country physicians, I am sorry to say, have very meagre libraries, as they are generally poor; and if writers on medicine would publish good works on this and kindred subjects, they would sell much more readily than scientific works on cell formation, or which end of a rat's tail is first formed. For the country physician, and I might add, for some in the city, plain facts—how to prescribe for and cure their patients, and how to prevent diseases—are of more importance than elaborate and scientific treatises, which, though important to the literature of the science of medicine, are really of no practical importance.

Danbury, Ct.

E. P. BENNETT, M.D.

NEWS AND MISCELLANY.

Dr. Sayre at the International Medical Congress.

The *British Medical Journal* says—

Among the more interesting demonstrations of the International Medical Congress at Amsterdam, were those by Dr. Sayre, of his method of treatment of spinal curvature and Pott's disease by suspension and the plaster jacket. The method was already known and successfully practiced by a few surgeons in Holland. The brilliant success of Dr. Sayre's remarkable demonstration will undoubtedly contribute to popularize rapidly this invaluable boon to surgeons and patients. The cases included one of a patient wearing one of the recent modern and highly improved apparatus, for the treatment of lateral curvature. At once, on removal of the apparatus, it was found that the patient stood nearly an inch higher without it than with it, as will often be found, on careful measurement, after removing any "special instrument;" for nearly all, by the downward pressure on the shoulder, actually depress the column vertically, while they

exercise lateral pressure on the convexity of the spinal curve. The suspension made and the jacket applied, the patient, carefully measured by the surgeons present, was found to have gained another inch and a quarter, and moved about with an ease and comfort to which he had long been a stranger. The immediate satisfaction and relief afforded, and the rapid and easy cures of Pott's disease and of spinal curvatures effected by Sayre's method and jackets, are now matters of such everyday knowledge and experience, that we can readily appreciate the enthusiastic satisfaction with which the demonstration and introduction of this method of treatment was hailed by new audiences of surgeons to whom they are still novelties. Dr. Sayre received the accustomed and well deserved tribute of enthusiastic approval of the large, crowded, and highly informed section of foreign surgeons before whom his brilliant demonstration was made. We say accustomed, because the same experience may have been noted wherever Dr. Sayre has demonstrated his method before an audience of medical men, whether at the great hospitals of London, at the congresses of Manchester, at Liverpool, or at Cork.

International Congress of Hygiene.

The third International Congress of Hygiene will take place at Turin, in April, 1880, under the patronage of the Italian Government. As at Brussels, in 1876, and at Paris, in 1878, the Congress will avoid political and religious discussions. At the Paris Congress last year there were eighteen nationalities represented, the Russian, German, and other governments appointing special delegates. It is anticipated that the forthcoming Congress will be equally well attended. Medical men will, of course, form the majority of the Congress, but chemists and veterinary surgeons are to have a place reserved for them. Architects and engineers are also invited, as with them to a large extent rests the application of the principles which men of science have discovered.

The Medical Law of California.

The San Francisco *Western Lancet* says—

The Medical Law of California is, perhaps, as perfect an instrument, practically, for the protection of medicine, as any yet devised. It is doubtful whether, in any State of the Union, there is a law which works so satisfactorily as does ours, in spite of the predictions of so many of the profession that it would fall to the ground. It has been declared constitutional by the highest tribunal of the State, it is upheld to the letter by the judiciary, and it is enforced actively by the police authorities. Arrests of notorious quacks are now of constant occurrence, and to the credit of the magistracy be it said, convictions follow in every case, the few who escaped punishment doing so through some flaw in the evidence only. The fight has been a long and hard one to get the law into shape, but it is now dealing efficient strokes upon the empiric hosts, and nothing but the apathy of the profession need hinder it from routing the bulk of them out of the State, bag and baggage.

Higher Medical Education.

The Medical Department of Yale College has announced that its system of instruction is now arranged in a graded course, extending over three full years, and that all candidates for admission, excepting those who have passed an examination for admission to Yale College or some similar institution, must present a degree in Letters or Science from a recognized college or scientific school, or pass an examination in the following subjects:—

1. Mathematics—Algebra to Quadratics; Euclid, 2 books; Metric System of Weights and Measures.

2. Latin—Translation of easy prose or of Virgil's *Aeneid*.

3. Physics—Balfour Stewart's *Elementary Physics*, or any equivalent work.

These examinations will be conducted in writing. Grammar, spelling and construction will be considered in judging of the papers. Graduates in medicine will not be required to pass this examination for admission.

The Detroit Medical College makes a similar announcement, requiring three regular sessions, and an examination at matriculation. But this examination does not include any Latin (an unfortunate omission), and no geometry.

Shady Lawn, Massachusetts.

This institution is at Northampton, Mass., under the care of Dr. A. W. Thompson, formerly of Northampton Lunatic Hospital, and a gentleman of large acquirements. It is designed especially for Diseases of the Mind and Nervous System; Medical and Surgical Treatment of Ailments of Women; The Alcohol and Opium Habits; The Laryngitis of the Seaboard; and Chronic Diseases of similar character.

In the treatment of mental disease Dr. Thompson has introduced the plan of systematic study as a means of strengthening the intellect. Of course, it is carried out on a plan adapted to the peculiar nature of the case; and we understand the results have been satisfactory. Physicians in search of an institution to which to direct patients of the classes mentioned will do well to correspond with Dr. Thompson.

The Williamson County (Ill.) Medical Association

met in regular meeting on Monday, October 7th, S. M. Mitchell, M.D., President, in the chair.

Dr. Fly read a paper on the Relation of Telluric and Meteorological Conditions to Malarial Fever.

A young man presented himself for examination, with a tumor in the supra-scapular region, which was diagnosed by the Association to be an aneurism of the subclavian artery.

Dr. Bently reported three cases of diabetes insipidus, and stated that he treated them all successfully with the tincture of chloride of iron, also one case of phlegmonous erysipelas of the leg.

On motion of Dr. Ferrell, Dr. Fly was requested to furnish the report of the proceedings to the MEDICAL AND SURGICAL REPORTER.

Anti-Vaccination Society.

The fools not being all dead yet, a number of them came together in New York last month, and organized an anti-vaccination league. It was presided over by some irregular practitioners connected with an eclectic college there.

Mr. William Tebb, an English gentleman residing in London, whose repeated refusals to have his daughter vaccinated was the cause of his being prosecuted by the authorities 13 times, and fined in a majority of the cases, was present at the meeting, and gave it the benefit of his experience and martyrdom.

Suicide in Germany.

Suicide seems to be on the increase in Germany. From the statistics for the year 1878 we gather that the figure of 1126 was reached, out of which 215 were women; in 749 cases death was produced by hanging, in 217 by drowning, and in 88 by injury to the brain.

The causes are thus assigned: In 284 instances melancholia, in 105 disgust of life, in 94 intemperance, in 90 intellectual disturbance, in 89 privations, in 65 physical suffering, and in 39 love. The ages varied from 90 to 14 years.

Personal.

—The death of Dr. James Graham, Emeritus Professor of the Ohio Medical College, took place last month.

—Dr. Henry Maunsell, one of the authors of Maunsell and Eavenson's *Diseases of Children*, died in Dublin last month, at the age of 73 years.

—Dr. E. S. Gaillard, having severed his connection with the Louisville Medical College, has removed to New York city, where he will henceforward reside, and where he will also publish the *Richmond and Louisville Medical Journal* and the *American Medical Biweekly*. His address will be 27 Clinton Place.

—The *Allg. Wiener Med. Zeitung*, announcing that Professor Hebra has been made a Hofrath, on account of the great services which he has rendered to science, observes that this is a well-deserved recognition of the deserts of one who is an ornament to the Vienna School of Medicine, to the celebrity of which he has so much contributed for more than thirty years.

A Sip of Punch.

Patient—Do you mean to say my complaint is a dangerous one?

Doctor—A very dangerous one, my dear friend. Still, people have been known to recover from it; so you must not give up all hope. But recollect one thing: your only chance is to keep in a cheerful frame of mind, and avoid anything like a depression of spirits!

Correction.—In Dr. Houtz's letter, page 350, in the next to the last sentence, *one-sixteenth* of a grain of atropia should read *one-sixtieth*.

Items.

—An Irish woman died last week, in New York, at the alleged age of 112 years.

—A Berlin dispatch to the *London Post* says: "The Municipal Council recommended the universal adoption of the practice of cremation."

—The late Dr. Le Moyne's will leaves his crematory in trust to his executors and their successors, for residents of the borough, or within five miles, who wish to use it, the charges in each case to cover the expenses of the burning.

—The National Board of Health has appointed a committee to meet the railroad representatives, and aid in the preparation of a system of rules and regulations governing inspections. It is hoped that the proprietors of steamboats interested in the subject will take similar action, to meet in conference.

—Addressing a large audience recently, on his return from exploration in Northern Siberia, Captain Wiggins said that, from his experience in long journeys through the heart of the country in midwinter, by sledges, he was strongly in favor of the benefit of abstaining entirely from the use of any kind of intoxicating drinks.

—A physician of Tallahassee writes to the National Board of Health, in October—

The country between our high lands and the coast is now affected to an unusual degree with malarial fevers of severe type, due, no doubt, to the extraordinary rainfall of the past few months, which has submerged a large portion of the low lands. At other times this portion of the country has been considered very healthy.

OBITUARY NOTICES.

—Dr. O. A. Carroll, a highly esteemed physician of Port Jervis, N. Y., has died. Resolutions of respect were passed by the Tri-States Medical Society, at its regular annual meeting, held at Port Jervis, October 8th, 1879.

—Dr. Isaiah W. Clawson, of Woodstown, N. J., died October 19th. The deceased was born March 30th, 1822; graduated at Princeton College in 1840; studied medicine in the University of Pennsylvania, taking his degree in 1843; was a member of the State Assembly in 1853; was elected a representative to the Thirty-fourth Congress and re-elected to the Thirty-fifth, serving as a member of the Committee on Revolutionary Claims.

—Mr. G. W. Callender, F.R.S., Surgeon to St. Bartholomew's Hospital, Examining Surgeon to the Royal College of Surgeons, etc., died at sea, in the "Gallia," October 27th. Mr. Callender arrived in this country September 3d, and after a visit to Canada and the White Mountains, came to this city, to pass some time with Dr. Lewis and other friends. Here he was attacked with an acute exacerbation of parenchymatous nephritis. There was marked oedema of the extremities, and copious albuminous deposits, with granular and hyaline casts in the urine. He received every attention from his professional friends, but was exceedingly desirous to return home, to which they gave a reluctant consent. He sailed

October 22d, with the result above stated. As a distinguished surgeon, an agreeable companion, and a gentleman of the highest character, he will be widely and long regretted.

QUERIES AND REPLIES.

Dr. I. M. S., of N. J., asks, "What is the best book on Domestic medicine, and price?"

Ans.—We know of none superior to the "*Handbook of Popular Medicine*," by the late Dr. G. H. Napheys; price \$2.00.

Dr. C. W. S., of Mass.—We do not club with the paper you speak of.

Advocatus.—Coffee, it is believed, produces anæmia of the brain; hence the vertigo which its use produces in some people.

Dr. Antonio.—The alleged age of "old Parr" is considered apocryphal.

MARRIAGES.

BENJAMIN—WHITE.—At the residence of the bride's uncle, Dr. J. M. Ridge, in Camden, N. J., on the 4th ult., by the Rev. Dr. Garrison, Dr. Dowling Benjamin, of Camden, and Miss Sallie Cooper White, of Bucks county, Pa.

HAMNETT—GREEN.—At Meadville, Pa., on the 7th ult., by the Rev. G. A. Carlsensen, assisted by Prof. J. Hamnett, D.D., William C. Hamnett, of Toledo, Ohio, and Katharine Wise Green, daughter of Dr. Alfred W. Green.

JOHNSON—BROCK.—On the 1st ult., at St. Clement's Church, this city, by Rev. Dr. Henry A. Coit, assisted by Rev. O. P. Prescott, Dr. Robert W. Johnson, of Baltimore, Md., and Julia W. H. Brock, daughter of John Penn Brock, Esq., of this city.

LOY—CHAMPLIN.—In Cincinnati, Ohio, October 2d, at St. John's P. E. Church, by Rev. Mr. Kinsolving, Dr. E. E. Loy, and Miss Nellie Champlin.

RIGGS—CHEESMAN.—In New York city, on Wednesday, October 8th, at the Church of the Transfiguration, by the Rev. George H. Houghton, D.D., assisted by the Rev. J. Tuttle Smith, George W. Riggs, Jr., and Kate, daughter of Dr. T. M. Cheesman.

SCUDDER—DAVIS.—In Cincinnati, Ohio, on Thursday, October 9th, by the Rev. W. H. Neilson, Jr., Henry Darcy Scudder, and Marvina James, daughter of Dr. J. M. Davis, of this city.

TIFFANY—GOODMAN.—At Salisbury Mills, Orange county, N. Y., October 2d, by Rev. D. J. Atwater, Loring O. Tiffany, of Harford, Pa., and Martha, daughter of A. Goodman, M.D.

TRASK—HOPKINS.—In New York city, on Wednesday, October 15th, at the Madison Avenue Presbyterian Church, by the Rev. William Lloyd, Frederick Marquand Trask, M.D., and Mary, daughter of the late Gustavus U. Hopkins.

KOONS—BREWSTER.—On Thursday, October 16th, 1879, by the Rev. E. E. Erskine, D.D., Philip R. Koons, M.D., and Miss Ninna R. Brewster, all of Newville, Pa.

DEATHS.

CLAPHAM.—Of apoplexy, at Astoria, Long Island, on Saturday, October 11th, 1879, Eduard Clapham, M.D.

KEELER.—In New York city, October 6th, 1879, Mrs. Hattie A. Keeler, wife of Dr. W. T. Keeler, aged 23 years, of consumption.

PALMER.—At Haywards, California, October 13th, Theodore D. Palmer, M.D., son of the late Captain Theodore D. Palmer, of Stonington, Conn.

PEUGNET.—In New York city, suddenly, on Friday, October 10th, Dr. Eugene Peugnet, of Fordham, in the 43d year of his age.

PHILLIPS.—In New York city, on Friday morning, the 10th ult., of pneumonia, after a brief illness, Henry J. Phillips, M.D., Captain and Assistant Surgeon, U.S.A.